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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)
	10/567,509	NOELLE, PHILLIPE
Office Action Summary	Examiner	Art Unit
	AMENE S. BAYOU	3746
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the c	orrespondence address
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period w - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tim vill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE	N. nely filed the mailing date of this communication. D (35 U.S.C. § 133).
Status		
Responsive to communication(s) filed on <u>07 Fe</u> This action is FINAL . 2b)⊠ This Since this application is in condition for allowant closed in accordance with the practice under E	action is non-final. nce except for formal matters, pro	
Disposition of Claims		
4) ☐ Claim(s) 1-46 is/are pending in the application. 4a) Of the above claim(s) is/are withdraw 5) ☐ Claim(s) is/are allowed. 6) ☐ Claim(s) 1-46 is/are rejected. 7) ☐ Claim(s) is/are objected to. 8) ☐ Claim(s) are subject to restriction and/or Application Papers 9) ☐ The specification is objected to by the Examine 10) ☐ The drawing(s) filed on 02/07/06 is/are: a) ☐ acceptable and applicant may not request that any objection to the company of the properties of the company of	r election requirement. r. ccepted or b)□ objected to by th	
Replacement drawing sheet(s) including the correcti		
11)☐ The oath or declaration is objected to by the Ex	aminer. Note the attached Office	Action or form PTO-152.
Priority under 35 U.S.C. § 119		
 12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of: 1. Certified copies of the priority documents 2. Certified copies of the priority documents 3. Copies of the certified copies of the prior application from the International Bureau * See the attached detailed Office action for a list of 	s have been received. s have been received in Applicati ity documents have been receive ı (PCT Rule 17.2(a)).	on No ed in this National Stage
Attachment(s) 1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date 05/08/06.	4) Interview Summary Paper No(s)/Mail Da 5) Notice of Informal P 6) Other:	nte

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DETAILED ACTION

Specification

1. The abstract of the disclosure is objected to because it contains the word "said" which is legal terminology often used in patent claims. In addition the abstract contains more than 150 words. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details. Correction is required. See MPEP § 608.01(b).

2. Claim 46 is objected to under 37 CFR 1.75(c) as being in improper form because a multiple dependent claim should refer to other claims in the alternative only and/or cannot depend from any other multiple dependent claim. See MPEP § 608.01(n). Accordingly, the claim has not been further treated on the merits.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

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4. Claims 15 (and thus its dependent claims 16-22) and 37 (and thus its dependent claims 38-44) are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

5. Both Claims 15 and 37 recite the limitation "the printed circuit board".

There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35
U.S.C. 102 that forms the basis for the rejections under this section made in this
Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 7. Claims 1 and 2 are rejected under 35 U.S.C. 102(b) as being anticipated by Hartel et al. (US patent number 6945757 which is equivalent of international patent publication WO 02057125).
- 8. In re claim 1, Hartel et al. 757 disclose a motor pump unit including:
 - Electric motor (1) being supplied with electric power through at least one motor plug connector (4.1, 4.2), is disposed on an axial side of the electric motor (1), in figure 1 and 2.Please note that in regards to the limitation "for driving a compressor wheel accommodated in a compressor housing", the recitation refers to an intended use and thus given no patentable weight. In regards to the limitation "facing the compressor housing", in line with the reasoning given if the motor is

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intended to drive the compressor it will definitely face the compressor housing since item (2) in figure 1 is pump housing.

- 9. In re claim 2, Hartel et al. 757 disclose a motor pump unit including:
 - Motor plug connector (4.1, 4.2), is formed as a male plug connector, in figure 1 and 2 and column 4, lines 15-17.

Claim Rejections - 35 USC § 103

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

- 11. Claims 3 and 4 are rejected under 35 U.S.C 103(a) as being unpatentable over Hartel et al. 757.
- 12. In re claim 3, Hartel et al. 757 as applied to claim 1 dislose the claimed invention except mentioning that the motor plug connector is formed as a female plug connector. But this modification would have been obvious to one skilled in the art since this merely involves the reversal of parts and it has been held that a mere reversal of the essential working parts of a device involves only routine skill in the art. *In re Einstein*, 8 USPQ 167. Also please note that it is notoriously known in the art to use male-female connectors interchangeably based on the structural configuration.
- 13. In re claim 4, Hartel et al. 757 disclose the claimed invention except mentioning that there are plurality of housing plug connectors. It would have been obvious to one skilled in the art to make plural connections as desired since this is a mere duplication and it has been held that mere duplication of

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the essential working parts of a device involves only routine skill in the art. St. Regis Paper Co. v. Bemis Co., 193 USPQ 8.

14. Claims 5-9 are rejected under 35 U.S.C 103(a) as being unpatentable over Hartel et al. 757 in view of Nestor (US patent number 5147229).

15. In re claim 5 Hartel et al. 757 as applied to claim 1 disclose the claimed invention except the following limitation which is taught by Nestor '229:

 Plug connectors (28) are blade-shaped and extend in an axial direction, in figure 2-4.

16. It would have been obvious to one skilled in the art to modify the plug connectors of Hartel et al. 757 by making them blade shaped as taught by Nestor'229 for easy and safe way of coupling.

17. In re claim 6 Hartel et al. 757 in view of Nestor'229 as applied to claim 5 disclose the claimed invention:

Nestor'229 disclose:

 Plug connectors (28) are slanted with respect to the radial direction, in figures 2-4.

18. In re claim 7 Hartel et al. 757 in view of Nestor'229 as applied to claim 5 disclose the claimed invention:

Hartel et al. 757 disclose:

 Housing plug connectors (4.1, 4.2) are perpendicular to the radial direction of the compressor housing (2), in figure 1.

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19. In re claim 8, Hartel et al. 757 in view of Nestor'229 disclose the claimed invention except mentioning that there are six plug connectors. It would have been obvious to one skilled in the art to make plural connections as desired (such as phase or other factors) since this is a mere duplication and it has been held that mere duplication of the essential working parts of a device involves only routine skill in the art. St. *Regis Paper Co. v. Bemis Co.*, 193 USPQ 8.

20. In re claim 9 Hartel et al. 757 in view of Nestor'229 as applied to claim 5 disclose the claimed invention:

Hartel et al. 757 disclose:

- Electric motor accommodated in an electric motor cartridge (1) ,wherein at least one motor plug connector (6.2) penetrates the electric motor cartridge (1),in figure 1.
- 21. Claims 10-12,14,32-34,36,45 are rejected under 35 U.S.C 103(a) as being unpatentable over Woollenweber et al (US patent number 5870894) in view of Hartel et al. 757.
- 22. In re claim 10, 32 and 45 Woollenweber et al.'894 disclose a motor assisted turbocharger including:
 - Compressor housing (28) for accommodating a compressor wheel (16)
 drivable by an electric motor (containing 36 and 44).

Woollenweber et al.'894, however fail to disclose the following limitation which is taught by Hartel et al. 757:

- Compressor housing (2),in figure 1 and 2 comprises at least one main power plug connector (5) connectable to an electric power source (via 4.1,4.2); and at least one housing plug connector (6.2) electrically connected to a respective one of the at least one main power plug connector (5) for supplying electric motor (1) with electric power, wherein housing plug connector (6.2) is disposed on an axial side of compressor housing (2), facing electric motor (1). Please note that compressor housing and pump housing are synonymous and also refer to the reasoning given in claim 1 about the intended use.
- 23. It would have been obvious to one having ordinary skill in the art at the time of the invention was made to modify the pump of Woollenweber et al.'894 by modifying the compressor housing in order to include a power plug connector as taught by Hartel et al. 757 to provide a plug connection that is free from distortion and resistant to breaking (which is clearly taught by Hartel et al. 757 in column 4, lines 30-35).
- 24. In re claim 11, Woollenweber et al.'894 in view of Hartel et al. 757 disclose the claimed invention except mentioning that the motor plug connector is formed as a female plug connector. But this modification would have been obvious to one skilled in the art since this merely involves the reversal of parts and it has been held that a mere reversal of the essential working ^parts of a device involves only routine skill in the art. *In re Einstein*, 8 USPQ 167. Also please note that it is notoriously known in the art to use male-female connectors interchangeably based on the structural configuration.

25. In re claim 12, Woollenweber et al.'894 in view of Hartel et al. 757 disclose the claimed invention:

Hartel et al. 757 disclose:

 Housing plug connector (4.1, 4.2), is formed as a male plug connector, is formed as a male plug connector, in figure 1 and 2 and column 4, lines 15-17.

26. In re claim 14, Woollenweber et al.'894 in view of Hartel et al. 757 disclose the claimed invention except mentioning that there are plurality of housing plug connectors. It would have been obvious to one skilled in the art to make plural connections as desired since this is a mere duplication and it has been held that mere duplication of the essential working parts of a device involves only routine skill in the art. St. *Regis Paper Co. v. Bemis Co., 193 USPQ* 8.

27. In re claim 32, Woollenweber et al.'894 in view of Hartel et al. 757 further in view of Woollenweber et al.'471 disclose the claimed invention:

Woollenweber et al.'894 disclose:

Turbocharger ,in figure 1,comprising a compressor housing (28) for accommodating a compressor wheel drivable by an electric motor (containing 36 and 44), further comprising a turbine housing (20) for accommodating a turbine wheel (14) driven by exhaust gas; a center housing (12) for accommodating a shaft (18) and the electric motor, and extending from the turbine wheel (14) through a journal bearing and the electric motor to the compressor wheel; wherein the compressor wheel is

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driven by the turbine wheel via the shaft and can additionally be driven by the electric motor,

Hartel et al. 757 disclose:

• Compressor housing (2),in figure 1 and 2 further comprises at least one main power plug connector (5) connectable to an electric power source (via 4.1,4.2); and at least one housing plug connector (6.2) electrically connected to a respective one of the at least one main power plug connector (5) for supplying electric motor (1) with electric power, wherein housing plug connector (6.2) is disposed on an axial side of compressor housing (2), facing electric motor (1). Please note that compressor housing and pump housing are synonymous and also refer to the reasoning given in claim 1 about the intended use.

28. In re claim 33, Woollenweber et al.'894 in view of Hartel et al. 757 disclose the claimed invention except mentioning that the plug connector is formed as a female plug connector. But this modification would have been obvious to one skilled in the art since this merely involves the reversal of parts and it has been held that a mere reversal of the essential working ^parts of a device involves only routine skill in the art. *In re Einstein*, 8 USPQ 167. Also please note that it is notoriously known in the art to use male-female connectors interchangeably based on the structural configuration.

29. In re claim 34, Woollenweber et al.'894 in view of Hartel et al. 757 disclose the claimed invention:

 Housing plug connector (4.1, 4.2), is formed as a male plug connector, is formed as a male plug connector, in figure 1 and 2 and column 4, lines 15-17.

30. In re claim 36, Woollenweber et al.'894 in view of Hartel et al. 757 disclose the claimed invention except mentioning that there are plurality of housing plug connectors. It would have been obvious to one skilled in the art to make plural connections as desired since this is a mere duplication and it has been held that mere duplication of the essential working parts of a device involves only routine skill in the art. St. *Regis Paper Co. v. Bemis Co., 193 USPQ* 8.

31. In re claim 45, Woollenweber et al.'894 in view of Hartel et al. 757 disclose the claimed invention:

Woollenweber et al.'894 disclose:

Turbocharger ,in figure 1,comprising a compressor housing (28) for accommodating a compressor wheel drivable by an electric motor (containing 36 and 44), an electric motor (containing 36 and 44), for driving a compressor wheel (16) accommodated in a compressor housing (28), electric motor being supplied with electric power through at least one motor plug connector (clearly labeled in the figure 1), further comprising a turbine housing (20) for accommodating a turbine wheel (14) driven by exhaust gas; a center housing (12) for accommodating a shaft (18) and the electric motor, and extending from the turbine wheel (14) through a journal bearing and the electric motor to the compressor

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wheel; wherein the compressor wheel is driven by the turbine wheel via the shaft and can additionally be driven by the electric motor,

- Compressor housing (2),in figure 1 and 2 further comprises at least one main power plug connector (5) connectable to an electric power source (via 4.1,4.2); and at least one housing plug connector (6.2) electrically connected to a respective one of the at least one main power plug connector (5) for supplying electric motor (1) with electric power, wherein housing plug connector (6.2) is disposed on an axial side of compressor housing (2), facing electric motor (1). Please note that compressor housing and pump housing are synonymous and also refer to the reasoning given in claim 1 about the intended use. Motor plug connector (4.1, 4.2), is disposed on an axial side of the electric motor (1), in figure 1 and 2. See claim 1 and 10 for obviousness.
- 32. Claims 13,15-26,30,31,35,37-44 are rejected under 35 U.S.C 103(a) as being unpatentable over Woollenweber et al.'894 in view of Hartel et al. 757 further in view of Woollenweber et al. (US patent number 5904471).
- 33. In re claim 13 and 35, Woollenweber et al.'894 in view of Hartel et al. 757 disclose the claimed invention except the following limitation which is taught by Woollenweber et al.'471:
 - At least one main power plug connector (38) is connected to at least one housing plug connector via a printed circuit board (34), in figure 3.

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34. It would have been obvious to one having ordinary skill in the art at the time of the invention was made to modify the pump of Woollenweber et al.'894 and Hartel et al. 757 by including a printed circuit board as taught by Woollenweber et al.'471 in order to have control electronics feature of the compressor operation.

35. In re claim 15 and 37 Woollenweber et al.'894 in view of Hartel et al. 757 further in view of Woollenweber et al.'471 disclose the claimed invention except mentioning that there are plurality of main power plug connectors. It would have been obvious to one skilled in the art to make plural connections as desired since this is a mere duplication and it has been held that mere duplication of the essential working parts of a device involves only routine skill in the art. St. Regis Paper Co. v. Bemis Co., 193 USPQ 8.

36. In re claim 16 and 38 Woollenweber et al.'894 in view of Hartel et al. 757 further in view of Woollenweber et al.'471 disclose the claimed invention: Hartel et al. 757 disclose:

- The housing plug connectors (4.1, 4.2) are slot-shaped and extend in an axial direction of the compressor housing, in figures 1-3.
- 37. In re claim 17 and 39, Woollenweber et al.'894 in view of Hartel et al. 757 further in view of Woollenweber et al.'471 disclose the claimed invention: Woollenweber et al.'894 disclose:
 - Housing plug connectors (54) are slanted with respect to the radial direction of the compressor housing (28), in figure 1.

38. In re claim 18 and 40, Woollenweber et al.'894 in view of Hartel et al. 757 further in view of Woollenweber et al.'471 disclose the claimed invention: Hartel et al. 757 disclose:

- Housing plug connectors (4.1, 4.2) are perpendicular to the radial direction of the compressor housing (2), in figure 1.
- 39. In re claim 19 and 41 Woollenweber et al.'894 in view of Hartel et al. 757 further in view of Woollenweber et al.'471 disclose the claimed invention except mentioning that there are six housing plug connectors. It would have been obvious to one skilled in the art to make plural connections as desired (such as phase or other factors) since this is a mere duplication and it has been held that mere duplication of the essential working parts of a device involves only routine skill in the art. St. *Regis Paper Co. v. Bemis Co., 193 USPQ* 8.
 40. In re claim 20,21,42,43, Woollenweber et al.'894 in view of Hartel et al. 757 further in view of Woollenweber et al.'471 inherently disclose the claimed invention since there should be at least one track in order to connect the control electronics to the power supply. Making the numbers of the tracks to 3 would
- 41. In re claim 22 and 44, Woollenweber et al.'894 in view of Hartel et al. 757 further in view of Woollenweber et al.'471 disclose the claimed invention except mentioning that the circuit board is circular and it is located between compressor volute and compressor wheel. But this would have been obvious to one skilled in the art since to change the shape of the circuit board as desired based on design choice absent persuasive evidence that the particular

simply a mere duplication that can be done as design choice.

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configuration of the claimed container was significant, In re Dailey, 357 F.2d 669, 149 USPQ 47 CCPA 1966. In regard to the location of the circuit board this is also a design choice since it has been held that rearranging parts of an invention involves only routine skill in the art. *In re Japikse*, 86 USPQ 70.

42. In re claim 23, Woollenweber et al.'894 in view of Hartel et al. 757 further in view of Woollenweber et al.'471 disclose the claimed invention:

Woollenweber et al.'894 disclose:

• Turbocharger ,in figure 1,comprising an electric motor (containing 36 and 44), for driving a compressor wheel (16) accommodated in a compressor housing (28), electric motor being supplied with electric power through at least one motor plug connector (clearly labeled in the figure 1), further comprising a turbine housing (20) for accommodating a turbine wheel (14) driven by exhaust gas; a center housing (12) for accommodating a shaft (18) and the electric motor, and extending from the turbine wheel (14) through a journal bearing and the electric motor to the compressor wheel; wherein the compressor wheel is driven by the turbine wheel via the shaft and can additionally be driven by the electric motor,

Hartel et al. 757 disclose:

 Motor plug connector (4.1, 4.2), is disposed on an axial side of the electric motor (1), in figure 1 and 2. See claim 1 and 10 for obviousness.

Woollenweber et al.'471 disclose:

- The shaft (15) serving as a rotor of the electric motor, in figure 2 and column 2,lines 20-23. It would have been obvious to one skilled in the art to use the shaft as the rotor device for the motor in order to save space and reduce the size of the supercharger.
- 43. In re claim 24, Woollenweber et al.'894 in view of Hartel et al. 757 further in view of Woollenweber et al.'471 disclose the claimed invention:

- Motor plug connector (4.1, 4.2), is formed as a male plug connector, in figure 1 and 2 and column 4, lines 15-17.
- 44. In re claim 25, Woollenweber et al.'894 in view of Hartel et al. 757 further in view of Woollenweber et al.'471 disclose the claimed invention except mentioning that the motor plug connector is formed as a female plug connector. But this modification would have been obvious to one skilled in the art since this merely involves the reversal of parts and it has been held that a mere reversal of the essential working ^parts of a device involves only routine skill in the art. *In re Einstein*, 8 USPQ 167. Also please note that it is notoriously known in the art to use male-female connectors interchangeably based on the structural configuration.
- 45. In re claim 26, Woollenweber et al.'894 in view of Hartel et al. 757 further in view of Woollenweber et al.'471 disclose the claimed invention except mentioning that the motor plug connector is formed as a female plug connector. But this modification would have been obvious to one skilled in the art since this merely involves the reversal of parts and it has been held that a mere reversal of the essential working ^parts of a device involves only routine skill in the art. *In re Einstein*, 8 USPQ 167. Also please note that it is

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notoriously known in the art to use male-female connectors interchangeably based on the structural configuration.

46. In re claim 30, Woollenweber et al.'894 in view of Hartel et al. 757 further in view of Woollenweber et al.'471 disclose the claimed invention except mentioning that there are six housing plug connectors. It would have been obvious to one skilled in the art to make plural connections as desired (such as phase or other factors) since this is a mere duplication and it has been held that mere duplication of the essential working parts of a device involves only routine skill in the art. St. *Regis Paper Co. v. Bemis Co.*, 193 USPQ 8.

47. In re claim 31 Woollenweber et al.'894 in view of Hartel et al. 757 further in view of Woollenweber et al.'471 disclose the claimed invention:

- Electric motor accommodated in an electric motor cartridge (1) ,wherein at least one motor plug connector (6.2) penetrates the electric motor cartridge (1),in figure 1.
- 48. Claims 27 -29 are rejected under 35 U.S.C 103(a) as being unpatentable over Woollenweber et al.'894 in view of Hartel et al. 757 further in view of Woollenweber et al.'471 as applied to claim 23 further in view of Nestor (US patent number 5147229).
- 49. In re claim 27 Woollenweber et al.'894 in view of Hartel et al. 757 further in view of Woollenweber et al.'471dislcose the claimed invention except the following limitation which is taught by Nestor '229:

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 Plug connectors (28) are blade-shaped and extend in an axial direction, in figure 2-4.

50. It would have been obvious to one skilled in the art to modify the plug connectors of Woollenweber et al.'894 in view of Hartel et al. 757 further in view of Woollenweber et al.'471by making them blade shaped as taught by Nestor'229 for easy and safe way of coupling.

51. In re claim 28 Woollenweber et al.'894 in view of Hartel et al. 757 further in view of Woollenweber et al.'471 and Nestor'229 as applied to claim 27 disclose the claimed invention:

Nestor'229 disclose:

 Plug connectors (28) are slanted with respect to the radial direction, in figures 2-4.

52. In re claim 29 Woollenweber et al.'894 in view of Hartel et al. 757 further in view of Woollenweber et al.'471 and Nestor'229 as applied to claim 27 disclose the claimed invention:

Hartel et al. 757 disclose:

 Housing plug connectors (4.1, 4.2) are perpendicular to the radial direction of the compressor housing (2), in figure 1.

Conclusion

53. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Amene S. Bayou whose telephone number is 571-270-3214. The examiner can normally be reached on Monday-Thursday, 9:00 am-5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Devon Kramer can be reached on 571-272-7118. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system.

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/Devon C Kramer/ Supervisory Patent Examiner, Art Unit 3746

/AB/